

IN THE CLAIMS:

Please cancel Claim 17 without prejudice.

Claim 1 (Currently Amended) An interbody spacer device for implanting between a pair of adjacent vertebrae to maintain a selected spacing and mutual orientation therebetween and comprising:

- (a) an anterior conical portion defined at least partially by a first surface having a substantially conically varying shape from an anterior diverged end to a converged end thereof with anterior threads extending radially outward therefrom and said first surface extending for at least two revolutions of said anterior threads;
- (b) a posterior cylindrical portion defined at least partially by a second surface having a cylindrical shape with posterior threads extending radially outward therefrom and said second surface extending for at least two revolutions of said posterior threads; and
- (c) said cylindrical portion being joined to said conical portion at said converged end of said conical portion.

Claim 2 (Currently Amended) A device as set forth in Claim 1 and including:

- (a) ~~at least partial thread members extending radially outward from said cylindrical portion and said conical portion, said thread members~~ anterior and posterior threads having crests defining an incomplete cylindrical shape.

Claim 3 (Original) A device as set forth in Claim 1 and including:

- (a) upper and lower vertebra engaging sides, each vertebra engaging side being formed in part by said first surface and in part by said second surface; and
- (b) opposite lateral sides, each lateral side being formed by a convex, generally cylindrical surface.

Claim 4 (Original) A device as set forth in Claim 1 and including:

- (a) stabilizing structure secured to said device and engaged with the vertebrae in such a manner as to laterally stabilize a spatial relationship between the vertebrae to thereby prevent tendencies of the vertebrae to pivot about said device.

Claim 5 (Original) A device as set forth in Claim 1 wherein the vertebrae include mutually facing vertebral surfaces and each vertebral surface includes a central region and an outer edge region, and including:

- (a) stabilizing structure connected to said device and extending laterally from opposite sides of said device; and
- (b) said stabilizing structure being sized and shaped to be adapted to engage edge regions of said vertebral surfaces to thereby stabilize a spatial relationship between the vertebrae.

Claim 6 (Original) A device as set forth in Claim 1 wherein each of the vertebrae includes an intervertebral surface having a central region and an edge region and including:

- (a) an end cap member secured to said device; said end cap member adapted to engage an edge region of an intervertebral surface of each of the vertebrae in such a manner as to resist lateral pivoting of said vertebrae about said device when said device is implanted as a sole spacer between the vertebrae and engaging a central region of each of the vertebrae.

Claim 7 (Original) A device as set forth in Claim 1 and including:

- (a) an end cap member secured to said device; said end cap member adapted to engage the vertebrae in such a manner as to resist lateral pivoting of the vertebrae about said device when said device is positioned in substantial alignment with a median plane of the vertebrae.

Claim 8 (Original) A device as set forth in Claim 1 wherein:

- (a) said device is configured to facilitate orientation of said cylindrical portion posteriorly of said conical portion upon implanting said device between the vertebrae to thereby urge the vertebrae to a desired angular relationship therebetween.

Claim 9 (Currently Amended) An interbody spacer device for implanting between a pair of adjacent vertebrae to maintain a selected spacing and mutual orientation therebetween and comprising:

- (a) an anterior conical portion defined at least partially by a first surface having a substantially conically varying shape from an anterior diverged end to a posterior converged end; said conical portion having an anterior thread extending radially outward therefrom and at least two revolutions therealong;
- (b) a posterior cylindrical portion defined at least partially by a second surface having a cylindrical shape; said cylindrical portion having a posterior thread extending radially outward therefrom and at least two revolutions therealong;
- (c) said cylindrical portion being joined to said conical portion at said converged end of said conical portion; and
- (d) ~~at least partial thread members extending from said conical portion and said cylindrical portion, said thread members~~ said anterior and posterior threads having ~~crest~~ crests that form an incomplete cylindrical shape.

Claim 10 (Original) A device as set forth in Claim 9 and including:

- (a) upper and lower vertebra engaging sides, each vertebra engaging side being formed in part by said first surface and in part by said second surface; and
- (b) opposite lateral sides, each lateral side being formed by a convex, generally cylindrical surface.

Claim 11 (Original) A device as set forth in Claim 9 and including:

- (a) stabilizing structure operably secured to said device and adapted to engage the vertebrae in such a manner so as to laterally stabilize a spatial relationship between the vertebrae to thereby prevent tendencies of the vertebrae to pivot about said device.

Claim 12 (Original) A device as set forth in Claim 9 wherein the vertebrae include mutually facing vertebral surfaces and each vertebral surface includes a central region and an outer edge region, and including:

- (a) stabilizing structure operably connected to said device and extending laterally from opposite sides of said device; and
- (b) said stabilizing structure being sized and shaped to be adapted to engage edge regions of the vertebral surfaces to thereby stabilize a spatial relationship between the vertebrae.

Claim 13 (Original) A device as set forth in Claim 9 wherein each of the vertebrae includes an intervertebral surface having a central region and an edge region and including:

- (a) an end cap member secured to said device; said end cap member adapted to engage an edge region of an intervertebral surface of each of the vertebrae in such a manner as to resist lateral pivoting of the vertebrae about said device when said device is implanted as a sole spacer between the vertebrae and engaging a central region of each of the vertebrae.

Claim 14 (Original) A device as set forth in Claim 9 and including:

- (a) an end cap member operably secured to said device, said end cap member adapted to engage the vertebrae in such a manner as to resist lateral pivoting of the vertebrae about said device when said device is positioned in substantial alignment with a median plane of the vertebrae.

Claim 15 (Original) A device as set forth in Claim 9 wherein:

- (a) said device is configured to facilitate orientation of said cylindrical portion posteriorly of said conical portion upon implanting said device between the vertebrae to thereby urge the vertebrae to a desired angular relationship therebetween.



Claim 16 (Currently Amended) In an interbody spacer device for implanting between a pair of adjacent vertebrae to maintain a selected spacing and mutual orientation therebetween, the improvement comprising:

- (a) said spacer device having a rigid body with threads extending radially outward therefrom; said body including an anterior conical portion defined at least partially by a first surface having a substantially conically varying shape from an anterior diverged end to a posterior converged end thereof and extending along at least two revolutions of said thread;
- (b) said spacer device including a cylindrical portion defined at least partially by a second surface having a cylindrical shape and extending along at least two revolutions of said thread; and
- (c) said cylindrical portion being joined to said conical portion at said converged end of said conical portion.

Claim 17 (Canceled)

Claim 18 (Original) A device as set forth in Claim 16 and including:

- (a) upper and lower vertebra engaging sides; each vertebra engaging face being formed in part by said first surface and in part by said second surface; and
- (b) opposite lateral sides, each lateral side being formed by a convex, generally cylindrical surface.

Claim 19 (Original) A device as set forth in Claim 16 and including:

- (a) stabilizing structure operably secured to said device and adapted to engage the vertebrae in such a manner so as to laterally stabilize a spatial relationship between the vertebrae to thereby prevent tendencies of the vertebrae to pivot about said device.

Claim 20 (Original) A device as set forth in Claim 16 wherein the vertebrae include mutually facing vertebral surfaces and each vertebral surface includes a central region and an outer edge region, and including:

- (a) stabilizing structure operably connected to said device and extending laterally from opposite sides of said device; and
- (b) said stabilizing structure being sized and shaped to be adapted to engage edge regions of the vertebral surfaces to thereby stabilize a spatial relationship between the vertebrae.

Claim 21 (Original) A device as set forth in Claim 16 wherein each of the vertebrae includes an intervertebral surface having a central region and an edge region and including:

- (a) an end cap member operably secured to said device; said end cap member engaging an edge region of an intervertebral surface of each of the vertebrae in such a manner as to resist lateral pivoting of the vertebrae about said device when said device is implanted as a sole spacer between the vertebrae and engaging a central region of each of the vertebrae.

Claim 22 (Original) A device as set forth in Claim 16 and including:

- (a) an end cap member secured to said device; said end cap member adapted to engage the vertebrae in such a manner as to resist lateral pivoting of the vertebrae about said device when said device is positioned in substantial alignment with a median plane of the vertebrae.

Claim 23 (Original) A device as set forth in Claim 16 wherein:

- (a) said device is configured to facilitate orientation of said cylindrical portion posteriorly of said conical portion upon implanting said device between the vertebrae to thereby urge the vertebrae to a desired angular relationship therebetween.

Claim 24 (Currently Amended) In an interbody spacer device for implanting between a pair of adjacent vertebrae to maintain a selected spacing and mutual orientation therebetween, the improvement comprising:

- (a) said interbody spacer device having a fixed face with a truncated substantially funnel shaped side profile.

Claim 25 (Currently Amended) The device according to Claim 24 wherein:

- (a) said face has a radially outward extending thread therealong and said thread has thread members with outer crests that form a substantially cylindrical discontinuous crest surface.

Claim 26 (Currently Amended) An interbody spacer device for implanting between a pair of adjacent vertebrae to maintain a selected spacing and mutual orientation therebetween and comprising:

- (a) said spacer device having a thread on at least vertebrae engaging sides thereof; said thread having a root that wraps at least partially around said spacer device and defines an incomplete anterior root surface and a posterior root surface having an overall shape of a funnel ~~section~~; said funnel including ~~an~~ a fixed anterior conical portion extending along at least two revolutions of said thread and a fixed posterior cylindrical portion extending along at least two revolutions of said thread;
- (b) said conical portion having a greatest radius near an anterior end of said spacer device; and
- (c) said cylindrical portion joining with said conical

portion and extending to a posterior end of said spacer device.

Claim 27 (Currently Amended) In an interbody spacer for operable placement between a pair of vertebrae; the improvement comprising:

- (a) said spacer having upper and lower faces; and
- (b) each of said faces having a rigid funnel shape with each of said faces having a greatest radius near an anterior end of each face having a posterior cylindrical shaped half and an anterior conical shaped half with thread members extending radially outward from said faces.

Claim 28 (Currently Amended) The spacer according to Claim 26 wherein:

- (a) said posterior and cylindrical shaped halves each extended along more than two revolutions of said thread  
~~a thread extends radially outward from each face.~~

Claim 29 (Original) The spacer according the Claim 27 wherein:

- (a) said thread has a crest that defines an incomplete cylindrical pattern from near an anterior to near a posterior end of said spacer.